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ORIGINAL LECTURES.

CLINICAL LECTURE

ON PELVIC ABSCESS, CERVICAL STENOSIS, AND PROLAPSE OF THE OVARIES.

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PELVIC ABSCESS.

GENTLEMEN,—The case now before us has been sent here from the country for diagnosis. It is a woman 33 years old, who has had four children, the youngest now two years old, and five miscarriages. Now, this latter is the point upon which I shall lay great stress. She had last May, a year ago, evidences of pelvic inflammation, suppuration, and a discharge of purulent matter from the bowels. When I ask her quietly whether her miscarriages were "honest" (or natural), she tells me they were. She accounts for them by muscular efforts in lifting, and so forth. Her first child was still-born. She has had difficult labors, but never any instruments used to deliver her. I now inquire whether the discharges from the rectum are accompanied with pains like dysentery. She says they are. Why do I ask this question? Because if there be an opening into the bowel high up, the pus would probably pass away without attracting the patient's notice by pain, and perhaps be long unnoticed. If, on the contrary, an abscess is emptying itself low down near the sphincter ani, it would cause more or less tenesmic pain, and the pus would be tolerably pure. In this case, then, we may suppose the latter to be taking place. A rectal examination, which I am now making, does not give me any additional information on this point.

Now, when we come to the womb itself I shall make my examination very carefully. If a woman has had a pelvic abscess, you must go to work gently with her. It won't do to put a sound off-hand into the womb, for in this way it would be very easy to light up a new inflammation.

I find, with my finger, that this womb is firmly fixed in the pelvic cavity. If I attempt to move it I give the patient pain. She has had a pelvic cellulitis or a pelvic peritonitis, or—what is more likely—both. There has been plasma thrown out, which has sealed the womb fast in adhesions.

The normal relations of the womb are like those of a ship riding at anchor. The ship, though moored in place, swings to and fro with the shifting tides and currents, with a limited but a free motion. But by and by come hard weather and frost, and the ship becomes frozen and fixed. Just so the womb. Naturally it floats in the pelvis, moored by its ligaments, but moving freely with the various movements of surrounding parts. But by and by its frosty night comes, and it too becomes fixed in one position. This womb's frosty night was the inflammation we have been finding out about.

The fixedness of the womb is not exactly like that of ice, however, for if you could feel the effusion around this one you would find it to be more like that of tallow. You could indent it; it is not of a stony hardness.

In the present case the abscess seems to have come to a head last August, and begun to discharge at that time. By the rectum, I find the effusion to be principally in the broad ligaments.

I shall not pursue my investigations any further. I am satisfied. Now, what is to be done? I inquire again whether just before this began she was menstruating or miscarrying. She says the latter. When I ask if it was natural, she says the doctor caused it.

Now, gentlemen, having sent the woman out of the room, I am free to say I don't believe those miscarriages were honest. Now, I am very frank; I am thinking out loud. This crime of abortion is so shockingly prevalent in this country—in every country—that I cannot believe this woman has had five honest miscarriages. And when I am called to a case of pelvic peritonitis, not after natural labor, I generally think it is due to abortion—criminal abortion—or to preventive measures,—that is, measures taken to prevent conception, the most common of which are astringent vaginal injections immediately after coition. In the great majority of cases, pelvic peritonitis is due to these preventive measures, next in frequency it is caused by criminal

abortion, and next, and much more rarely, by natural abortion. Sometimes, indeed, it is caused by catching cold while menstruating, or from a local chill. A woman wishes to go to a ball, and doesn't want to be sick while she is there, so she takes an injection of cold water to check the flow. Or the trouble is sometimes caused by the regurgitation of retained menstrual discharge in an anteflexed uterus, and in some cases of retroversion.

The symptoms are tenderness, chill, followed by high fever and great local sensitiveness; the knees are drawn up, as in all cases of peritonitis; the temperature 102°–103°, and the pulse never below 120. If you have these symptoms you may justly infer a pelvic peritonitis; but if in addition you find the vagina hot, the womb tender and, after a few days, hardened plasma round it, there can be no doubt what you have to deal with.

The treatment I like best consists of applying large poultices to the abdomen and giving ten-grain doses of quinine every four hours until cinchonism is established. To these I add the use of morphia to control pain. Sometimes a hypodermic of morphia will act wonderfully, and seem to cut the disease short. When the height of the disease is past, blisters to the abdomen often do much good. They should be about four inches by two or three. Then you may give tonics; but don't give iron. My experience is that iron tends to send blood to the pelvic organs; so I don't use it when congestion would be dangerous. I rather give the muriate of ammonia, which has an alterative action, in five- to ten-grain doses. I also give corrosive sublimate, in doses from one-twenty-fourth to one-twelfth of a grain, three times daily. It is well, too, to have some way to disguise the taste of the muriate of ammonia, for it is very disagreeable. I usually give it either as a compressed five-grain pill or mixed with extract of liquorice. You can combine equal parts of these in about a dessertspoonful of cinnamon-water, and the taste of the ammonia is very well hidden.

But I must hurry. The subject demands more time than I can now give it. In a few words, let me add, when a pelvic abscess points it is right to open it. It may point in the vagina, or the rectum, or the bladder, or above Poupart's ligament. If it points where you can find it, it is right to thrust your aspirator-needle in and let out the pus. If it opens spontaneously into the bladder or the rectum, the woman runs a good chance of having a fistula and a discharge year in and year out, perhaps for her whole life.

In cases that have passed the acute stage, rest in bed is very important, and the use of tonics. To those already mentioned iron can now be added. This is best given in the tincture of the chloride. Blisters would now be out of place. Patience and long-continued attention to hygienic conditions are of the utmost importance. There are cases in which, without irreverence, we may say what the great Arabian physician said, who, when asked why women, just nine months after conception, fall in labor, replied, "By the grace of God." Here the art of the physician seems to be of little avail, and nature to be the great healer.

STENOSIS OF CERVIX UTERI.

This woman, gentlemen, has been married seventeen years, and never conceived. Every month she has very severe dysmenorrhœa. I find, on examination, that the cervix is like that of most nulliparous women, firm and small, and with a small os. The cases are quite common where the troubles—sterility and dysmenorrhœa—for which this woman comes to us are caused simply by mechanical conditions. Sometimes we find a natural stenosis, sometimes an anteflexion. When a woman has never borne children, we usually find an anteflexion, which is only an exaggeration of the normal anteversion of virgins. When a woman has borne children, however, we usually find a retroversion or retroflexion. This is induced by subinvolution, the weight of the womb and the pressure of the bladder causing the former to topple over backward in the direction of least resistance. There are exceptions to this rule. Indeed, as I pass my finger in this vagina I find a feeling as if there were here a retroflexion; but this is one of those cases where the womb seems to lie in all directions. With the sound I find a sinistro-lateral flexion. The womb is a little more than two and a half inches long.

If our patient were not under ether, I should probably put in a pessary, but as it is I shall dilate the os forcibly. First, however, I shall take the curette and see if

there are any vegetations of the endometrium; if so, we will at once get rid of them, and increase her chance of conception. I find none, or very few; so I will put in the dilator till the end touches the fundus of the womb, withdraw it half an inch, and expand the blades, so as to stretch open the canal.

I now send the patient out. The instrument will be left in place—as the ether is suspended—until she begins to squirm (that will be, perhaps, in fifteen minutes), when it will be removed.

PROLAPSE OF OVARIES AND RETROVERSION OF UTERUS.

This woman has had two miscarriages, one artificial. She began menstruating at eleven and a half years, was married at sixteen, in ten months had a miscarriage at five months, and, five years ago, a second at two months; has always had severe dysmenorrhœa, and since the last miscarriage worse than before. During the last year she menstruated only three times, and now she has metrorrhagia; she is hysterical, and has difficult micturition and defecation, with wandering pains in the abdominal and pelvic cavities.

Upon examination, I find a very tender spot on the right side of the uterus. It is a tumor, not hard, but elastic. It either contains fluid, is a cyst, or it is the ovary. To determine this I make gradual pressure upon it, and find I cause a pain just like that which is caused by a blow upon or squeezing the testicle. So I think it is the ovary. On further examination, I find the left ovary also is prolapsed and the womb retroverted.

Now, how shall this case be treated? Shall we put in a pessary? It would be ridiculous to do so when the womb is so sensitive; our patient could not bear it. The proper plan is to put the woman in bed, and give her some medicine to diminish the congestion of these parts. We can order Hunyadi János water or Rochelle salt in a large quantity of water to be taken every morning, to move the bowels two or three times a day. Leeches to the womb in such cases sometimes do good, and local scarifying, though the former are often very painful; scarification is better. We may also give twenty-grain doses of the bromide of sodium three or four times a day.

After the activity of the system has been somewhat reduced, we have certain remedies which act a great deal like specifics,—not that they are specifics, but they seem to be of very great service in such cases. We may use first the bichloride of mercury combined with the muriate of ammonia, as mentioned when I spoke of pelvic abscess. When these lose their effect, I use the chloride of gold and sodium, one-eighth of a grain t. d. I have five grains made into forty pills, and give one three times a day, and gradually increase the number at a dose until two or even three pills are taken thrice daily. Sometimes, too, I guard the dose with a little opium.

This woman, too, must learn and practise the "knee-breast" position. She must kneel upon the floor, with her knees ten or twelve inches apart, let her breast come down against it, while her head lies in her left hand; then with her right she must open the vagina; the weight of the viscera will then cause all the pelvic organs to tend to leave the pelvis, while air rushes in and fills the vagina. This is a very valuable aid to the restoration of displaced pelvic viscera. The woman may judge of the success of her attempt by the feeling and sound of the expelled air as it leaves her vagina when she rises.

ORIGINAL COMMUNICATIONS.

CLINICAL NOTES ON DUCHENNE'S DISEASE.

BY S. WEIR MITCHELL, M.D.

Read before the Philadelphia County Medical Society, March 10, 1880.

I INTENDED, this evening, only to have said something of the hygiene of Duchenne's disease, and to have shown certain forms of mechanical support which I have found useful in this or other maladies. When, however, I came to review my notes of cases, I found myself tempted to speak of a number of matters connected with this cruel malady. It is a desire to confine myself chiefly to points little discussed or in doubt, and to omit familiar knowledge, that will give to this paper a somewhat disconnected appearance.

It seems to me important that the mass of the profession should realize the inexorable fatality of posterior sclerosis. It is a conclusion from which we shrink in each individual case, and this has, I think, given rise to a good deal of false hope, which would be really of no moment did it not

lead very often to consequences which are only to be deplored.

I believe, as I shall state by and by, that a good deal can be done for this disease; but nothing ever done for it has, in my experience, led to an absolute cure. Like others, I have certainly met with many examples of arrested development of the disease, or of temporary lessening of symptoms, or even of a notable loss of some of the symptoms which are most troublesome. Such cases are well known. I have elsewhere compared the progress of Duchenne's disease to that of a man who has an inevitable staircase to descend. He may linger or go back, but the descent is still to be taken, and the best he can hope for is to go down slowly and with long pauses and rare retrogressions.

These gains and these pauses are now a well-known part of the natural history of the disease. Their extent is, in some cases, curiously delusive, and may constitute such a delay as is nearly equivalent to a cure. Among my notes I find five cases in which there were remarkable pauses. In one twenty years elapsed without change; in the others periods of five to fifteen years went by without the patient seeming to lose or gain. In another case, which I shall speak of near the close of this paper, a yet longer time than any of these afforded went by without notable change. In other cases there is the yet more remarkable fact of certain gains without known cause.

In three of my cases, to take extreme examples, there was at one time such ataxia of motion in the arms as to make them useless, and in each of the three these limbs reacquired useful movement, while the whole case progressed slowly from bad to worse.

It is clear that in this, as in most spinal disorders of an inflammatory nature, there is a constant element of mischief,—the sclerosis,—which, once in possession, seems implacable; and also there is a congestive element, which varies in amount and intensity, and may thus be called on to account, by its variations, for some of the changes, reliefs, and abrupt gains which at times surprise us and inspire physicians of sanguine temperament with the pleasant belief that they are curing a case of sclerosis.

It is less easy to account for the arrest of these cases than for the changes I mention; but it is altogether probable that posterior sclerosis may really be a systemic disease, of which the spinal changes are but one symptom or part, the whole causal conditions being as yet in darkness. Meanwhile, however, the mere facts of these natural and long arrests of a disease usually progressive offer to future medicine some ray of hope.

Nay, I can see that if, in the changes of existence, it happens that some cases cease to progress and remain inactive for years, or for life, it must be for the reason that a combination of conditions has arisen such as is hostile to the growth of the disease. When we have learned what these are we shall begin to have legitimate hopes of mastering the malady.

My doubts in regard to cures of this malady are shared by almost all of those who have had a great experience, and this is seen either in their positive assertions or in the calm indifference with which they dismiss the whole matter of its therapeutics, after going into the minutest details of natural history.

In France there is still some belief in the value of mineral waters as a means of curing ataxics, and a certain reputation attaches to the springs of La Malou, in L'Hérault. M. Grasset's assertion of the confidence with which the waters of La Malou have inspired practitioners like Charcot and M. Combal, of Montpellier, excited some interest in my mind, and I felt called upon to learn more directly how much there might be in these assertions. The answers, which came to me in private letters, hardly bear out the statement of confidence to be found in Grasset's book, nor was my belief in La Malou increased by the experience of the single patient sent by me to test its value.

I ought to add that in the interesting and modest report on La Malou by M. Privat he states most positive results as due to the waters in question. The cases, as usual, leave much to be desired, in the way of detail, as to what symptoms have disappeared and how long they have been absent. Of seven favorable cases given in Privat's report, one alone can be called a cure. It has the more value as being in the person of a physician, and as having, according to the history, been cured nineteen years after the onset of the disease.

Most ataxics in this country resort, soon or late, to the hot springs of Arkansas, as, a few years ago, they used to go to Gettys-

burg. I have seen no instance of good from either spa which was not temporary and really due to change of air, while I have seen only too many cases which were more hurt by the long and tiresome journey to Arkansas than helped by the alteration of their surroundings.

As concerns cases like the single cure in Privat's report, it is vain to theorize. The one case in a thousand which recovered must have had some peculiarity which set it apart from the nine hundred and ninety-nine which did not recover, and all that we can do at present is to acknowledge our ignorance and turn for hope to a yet more careful study of this baffling malady.

But in what direction shall we turn? The question opens a large and possibly, in the future, a fruitful field. We know but too well that when this sclerosis is in full possession we can do but little. We then naturally ask ourselves whether, in the earliest stages of the disorder, treatment might not be more efficient, and are met by the statement—to be found in numberless books and papers—that the earliest signs of posterior sclerosis are:

1. Troubles of the motor apparatus of the eyeball.
2. Slight urinary troubles.
3. Neuralgia.
4. Vertigo.

One, two, or all of the four may be the primary signs of mischief, and constitute the first evidences of a malady which in time develops itself in the shape of defective equilibration. The criticism which I feel called upon to make is twofold. First, I may say that, as a rule, the primary lesion which calls attention to the existence of this disorder in the body is usually the eye-trouble or the neuralgic pain, or, more rarely, vertigo. If it be the former, the patient commonly resorts at once to an ophthalmic surgeon, who detects either ptosis and insufficiency of the *rectus internus*, or defect of power in the *rectus externus*, or amblyopia, or some peculiarities of the pupil. He is but too apt in either case to overlook the constitutional malady and to resort, after more or less delay, either to an operation or to the use of prisms. In cases of definite unvarying defect of muscular power an operation may be well enough; but the muscular paresis causing ataxic squints is excessively variable, so that an operation only offers a definite remedy for a variable disorder. A graver criticism of the therapeutics of the knife is that the one squint may be followed by another involving an opponent muscle, and that in a majority of cases the trouble is not a permanent one, and if left to time is sure, in a certain percentage of cases, to result in a cure, or at least in such a modification of the symptom as to make the annoyance endurable. The prescription of glasses to restore binocular vision is less objectionable, but no glass will answer fully where, as is usually the case, the trouble is variable,—slight to-day, extreme to-morrow. The real objection lies not in the glasses, but in the fact that their use contents for a time both the patient and the doctor, and substitutes the treatment of a symptom for that of a grave general disease, of which the eye-symptom should be a sufficient warning.

An illustration of a part of my meaning was furnished last week by the case of a noted railway official who has posterior sclerosis. It began with an internal squint. He has since suffered five times with the same trouble, not always due to paresis in the same muscle. Each time the squint has after a time disappeared entirely.

When, however, it is not the eye-trouble, but the neuralgia or the vertigo, which is the emphatic sign of disease, it is usually the general practitioner who is at fault, and who continues, for a period of fatal delay, to treat as rheumatic that pain which is the pregnant indication of a graver malady. The result in either case is that it is rare for neurologists to see posterior sclerosis in its earliest stage, and therefore in that condition which may reasonably be supposed to afford a hopeful chance of treatment.

But let us look back still further. Is it not possible that in this, as in other diseases, there may be a stage which precedes that of the distinct signs now so well known, and which, if it were further studied, might afford opportunities of treatment which, with our present knowledge, are somewhat wanting? A larger and more refined study of the prodromes may yet open for us, in this as in many disorders, a field for research and for efficient remedial means of which as yet we little dream.

It is never pleasant to say to a man who does not feel very ill that he is in the grasp of a disease which is an almost absolute sentence of gradual failure and ultimate

death; nor is it always wise to do so, unless something in the pecuniary situation of the patient makes it a kindness to save him if possible, by such a decision, from the dangerous fatigue of long journeys to useless spas, or to convince him of the folly of going from doctor to doctor with a lessening purse and a growing disease. I have said above, to save him "if possible." Very often it is not possible. The temperament of this disease is as hopeful in most cases as is that of tubercle of the lungs, and few men can be made to believe that they are incurable.

Let us pass, then, from this unsatisfactory question, and ask ourselves what we shall advise in a case of posterior sclerosis which, having run the gauntlet of eye surgeons, water-cures, and hot springs, has come down from higher levels of hope to the sad knowledge that it is incurable, and asks of us only, How shall I live so as to be most comfortable and useful, and in what way can I postpone the inevitable result?

As regards treatment by drugs, I am sure that I have seen, over and over, good result from two drugs,—nitrate of silver and iodide of potassium,—and of these the latter has given me the best results. Nor can I say that these were seen only in cases of syphilitic origin, my belief being that, even if sclerosis have been a sequence of syphilis, it is in no respect made thus more easy of cure. In fact, some of my best results have been won in scleroses where there was no reason to suspect a specific origin. In one case, a physician, the gain was from inability to walk unaided up to full power to walk without help or even a cane. In another, also in my care just now, the improvement was as great. I have seen the largest gain in cases of habitual drinkers, who became entirely abstinent men while being treated, with one- or two-drachm doses of iodide.

The question of hygiene is the next question which arises.

There is a period, often a long one, in which the ataxic is able to enjoy life to a considerable extent before his powers of locomotion fail. It is in this stage of the disorder that it is most important for him to live by certain rules, which are not at all those which should govern healthy people.

Heat and Cold.—Ataxics vary strangely as to their power to feel the influences of temperature and of storms, but, as a rule, it may be assumed that they are more sensitive than well people. While, in my opinion, nothing is more uncertain than the causation of posterior sclerosis by several of the influences to which it is apt to be attributed, nothing is more distinct than its origin, in a certain number of cases, from exposure to cold or from too cool or too prolonged bathing. In these instances the cause and effect are so related as to leave us little reason to cavil. An abrupt attack of neuralgia appears to mark the onset, and the disease thenceforward runs its course. In two of the cases thus begun I had most reason to be struck with the patients' sensitiveness, but in a goodly percentage of ataxias, no matter how produced, a like peculiarity exists, while also many are totally free from all such disturbances.

The great heats of our summers are very hurtful to these patients, and no class of people seem to benefit more and more plainly than they by changes of climate. The situations which suit them best in summer are moderate elevations, such as the foot-hills of the Alleghanies, or Saratoga, or the Adirondacks. The seaside or cold sea-baths are undesirable. The somewhat mysterious group of aerial states which accompany or constitute storms are most distressing to many ataxic neuralgics. Like the traumatic neuralgics, some of them can predict storms with certainty, and begin to feel their baleful influence long before the rain-belt reaches them. Several of my ataxic cases have kept records for me of the relation of their pain to storms. It is not so certain as in the traumatic neuralgias, and some ataxics never feel a storm. Mr. B. has daily more or less pain, but he is also liable to acute attacks: exposure to cold will cause them, indigestion as surely, and he believes that about sixty per cent. are due to storms. In Captain Catlin's case of traumatic neuralgia ninety-eight per cent. were so related. Mr. C. traces seventy per cent. of the increases of pain to storms. Mr. L. P. has never been able to discover that storms do more than depress him mentally.

I hope at some time to print in detail all that I have learned regarding the influence of storms upon neuralgias other than traumatic. What is most wanted is a set of observations by some victim of ataxia with pain, which shall repeat with equal

care those made by Captain Catlin in his own case, and I make here this statement of a want, that it may possibly attract the notice of some one who unites in his own body and mind the needed qualifications.

Electrical Storms. — Electrical storms do not appear to disturb ataxics, although these sufferers now and then share with some hysterical people the power of being anomalously affected by the use of currents of electricity. I have seen several who were made to cough violently when the currents (constant) were used on the cervico-dorsal vertebræ; while in some galvanism has seemed to increase the local loin pains, and in rarer cases to give rise to muscular twitches in the legs when applied to the spine.

Clothing and Warmth.—Increased sensitiveness to cold and storms is, then, an inconstant symptom, but there are a few ataxics who are so readily affected that the exposure of undressing gives rise to pain. I have now in my care one such unhappy person. The use of ice to his dorsal spine gives rise to decided spasms of the legs, and when employed on the cervical and upper dorsal regions it causes vertigo, with tendency to fall forward. It seems as if this gentleman were in a state approaching the normal skin-sensitiveness of birds, in which the shock of rhigolene spray (or, as Ott has shown, the application of sulphide of carbon to the skin) gives rise to convulsions. The general sensibility of ataxics to storms and cold makes it, therefore, needful for them to exercise unusual care in avoiding abrupt changes of temperature and in watchfully suiting their dress to the season. I have known some sufferers from ataxic neuralgia who thought they found comfort in wearing buckskin over a thin under-dress. It is also desirable, in persons who can move about so little as some of these, that they should have, in winter, the great advantage of the radiant heat of an open fire rather than a baked furnace-air, which, by drying the surface, causes so much cooling, by evaporation, as to make a very high temperature essential to comfort.

Exercise.—The question of the hygiene of exercise in posterior sclerosis is a very interesting one from more than one point of view. It would seem probable that excessive over-exertion ought to be a fruitful cause of this disease. I can recall but one case in which it seemed to be so, and in this the patient was also exposed to cold. He was forced, on one occasion, to swim for his life during an hour in rather cold water. On reaching shore, he became suddenly conscious of unnatural weakness in the legs. The day after he had slight pains, and thenceforward the disease, thus abruptly started, progressed rapidly, and with but little check.

Since, then, exertion is a rare cause, it might be thought that it would not prove hurtful in the developed disease; but this can hardly be said to be the case. The hygiene of exercise is horribly simplified in all advanced ataxic cases by the increasing trouble of locomotion, but in the early stages, when the patient is still able to walk with more or less ease, the extent to which we shall advise exertion must depend on the peculiarities of the case. I think I have elsewhere made it reasonably probable that, as a rule, all fatiguing exertion is likely to be hurtful, by proving that, in many cases, total abstinence from exercise is useful. I am sure that there are many ataxias which, in their earliest stages, would be greatly helped by long rest in bed, and I have elsewhere reported examples of such definite gain.

Apart from this fact, it is sure that some ataxics suffer no harm from moderate exertion, while it is equally clear that others are at their best early in the day, and are made worse for every effort at exercise. On the whole, it may be said that all of this class of persons should sedulously avoid fatigue, and that many of them are the better for not walking at all. I presume that most neurologists can recall cases where positive injury came of some excess in exercise. It is but a week since a most notable instance fell under my own observation, where sudden and disastrous progress downwards followed a long and exhausting journey. In such ataxic persons as are at all sensitive to the influence of exercise, and especially of extreme exertion, it is apt to be followed by slight increase of strabismus, by sense of lassitude, and by definite increase of neuralgia and of incoördination.

I need hardly say that it is somewhat difficult to persuade these patients to avoid exercise, when the only obvious harm which comes to them arises from great over-exertion. It is usually needful to explain to them most clearly the reasons which have induced most neuro-patholo-

gists to agree with me in this matter since I first called attention to it. It is somewhat remarkable that even those cases which have touched the limits of the paralytic stage are competent at times, under great excitement, to make exertions which seem incredible. The gentleman whose case I have last mentioned had become so helpless as to walk only when supported by two persons. When in this state a fire took place in a hotel at Cape May. Remembering that he had left certain valuable papers in his bedroom, he went alone up a flight of stairs to his room, secured the papers, descended, and fell at the door of the hotel. A second case, of like nature, exhibited equal power for a few minutes after escaping unhurt from a collision on a railway.

As concerns exercise, then, I usually advise the patient very early in the case of the risks of fatigue; and, whether or not I advise a period of absolute repose, I make prominent the necessity of avoiding exercise. If at any time I see a tendency to rapid loss of power, or if to walk is clearly hurtful, I advise some form of crutches or other support, and I advise them long before the patient feels them to be essential. The result is that of a biped I make a quadruped, and, as the arms suffer in this disease last and least, I throw a part of the duty of locomotion on them.

Now, in ataxics, and in some hysterical people, the use of crutches is very apt to cause what I fully described in my book on Nerve Injuries as crutch-palsy. It comes on in hystero-palsies because of the utter limpness of the user of the crutch, and in ataxia it is due to a remarkable tendency on the part of the nerves to lose conductibility upon even moderate pressure. Thus, ataxics will often complain to you that if they sit so as to compress the sciatic on the edge of a chair, the foot will too speedily, as we say, "go to sleep." For like reason the upper bar of the crutch may occasion a numbness, and finally a lack of power, which is apt to begin in the ulnar distribution in the hand. Whenever any one is put on crutches it is well to teach him to distribute weight between the upper and lower cross-bars of the crutch.

I shall exhibit, at the close of this paper, some of the forms of mechanical support which I have devised for the use of ataxic and other persons. They have already been described in detail, in a lecture on Hysterical Palsies, in the *Monthly News and Abstract* for February and March, 1880.

The evil which comes of such rest as is either desirable or enforced by the growth of the disease may be lessened by having the patient well rubbed once a day. I should prefer to say kneaded, but really no one word expresses what the process should be when we desire to stimulate skin, muscle, and joints. The objects are to excite locally the circulation, to empty thoroughly all the vessels within reach, to flush the whole limb so as to raise its temperature, and to stimulate vigorously the muscles so as to give them, at least for a time, the tone they lack.

Too much mystery is usually thrown about this simple process by those who practise it for a living, but it can readily be taught to any strong and reasonably intelligent servant, and I now know many ataxics who are thus treated every day, to their gain and comfort, by a nurse or a servant.

Digestion.—I do not think that the ataxics are especially liable to dyspepsia, apart from the ferocious gastro-intestinal attacks, which seem to come and go without known cause, or are, in a few persons, caused by storms or exposure. They are able to eat and digest much as others are, but they usually are forced to take aperients from time to time. A pill of aloes and iridin, or of aloes, ox-gall, and belladonna, answers usually, or suffices if aided by an enema.

Sexual Hygiene.—The hygiene of the sexual organs is a far more important matter. Some of the French observers ascribe a large proportion of cases to sexual excess, and it is certainly true that many ataxics confess to over-indulgence; but, on the other hand, an increased sexual appetite is one of the very first signs of the onset of this disease: so that we may readily mistake an effect for a cause. I may here note, as a curiosity of this subject, that two of the very few ataxic women I have seen suffered for a year or more from dreams of coitus before any other notable symptom declared itself. In them, as in men, these erratic dreams gave rise to the most extreme exhaustion.

In some few cases the loss of virile power comes very early, and is well marked; but I know of many ataxics who have had children since their disease was well marked,

and it is possible to meet with cases, like one I have seen within a week, where the paralytic stage has been reached without loss of virility. Most of the ataxics I have questioned are positive as to the bad results which they feel from sexual intercourse, and there is probably nothing as to which they need to exercise more care than as to this. Some French physicians absolutely proscribe all intercourse, and believe that it is one of the greatest barriers in the way of cure in the early stages of this obstinate disease. At La Malou, where Dr. Privat sees a great number of posterior scleroses, the prohibition of all sexual intercourse is absolute and peremptory; but in this, as in other matters, it is well to be guided by a study of the individual. Where sexual intercourse is injurious to ataxics it is usually no doubtful injury, and is followed by nightly pollutions, by sense of exhaustion, by pain in the loins, and sometimes by attacks of neuralgia. In rare cases none of these effects ensue; and in either case the proper course is clear enough.

Bladder. — As the case advances, the utmost care is needed in regard to the bladder. It is apt, soon or late, to become feeble; retention of a portion of urine, with decomposition of the secretion, follows; then cystitis of a low type results, and but too often this is the beginning of the end. At the least sign of trouble it is well to use the catheter, and to train the nurse or patient to its use.

Tobacco. — Tobacco has a decisively hurtful influence on most ataxic patients, causing, in some of them, the most remarkable increase of nervousness, and temporarily impairing locomotion. It were best avoided altogether.

Duration.—It happens to every one to be asked how long a given case of posterior sclerosis will last, and to what extent the capacity to use the brain will be lost. The latter question is easily answered. I can now recall ataxics engaged in pretty active business, as lawyers, or merchants, or clergymen, or doctors, whose sole incapacity arises out of their pains and their lack of muscular coördination. As to how long a man will live with ataxia is a harder question, and we have no clinical material to help us to definite answers; I mean that nothing about the character of the onset is predictive of the duration of the malady.

I saw a case reach the paralytic stage in three months from the vertigo which was the primary symptom. Death took place within three years. As an illustration of the other extreme, the following case possesses unusual interest:

I was summoned, two years ago, to a neighboring city to see a lady whose history was briefly this. At the age of four years she received a blow on the cervical spine. It was followed by great pain, retraction of the head, and a very rigid state of the posterior muscles of the neck. The treatment by moxas and blisters was severe, but successful, and within a year she recovered entirely. It was soon observed, however, that she had become slightly awkward in her movements, and was unable to walk easily in the dark. As she grew older these peculiarities grew no worse, but were found to limit her power to do with grace or readiness what other children could do. Thus, she could never learn to dance, and reeled if her eyes were shut. Despite these drawbacks, she grew up, married, and had children. When about forty years old the ataxic symptoms began to increase, and for the first time there was distinct numbness of the soles. To these symptoms were added some pain, and finally distinct atrophy, with the usual evidences of degeneration of the gray anterior columns.

TRANSLATIONS.

Poisoning by the Chlorates. — F. Marchand (*Cbl. f. Chir.*, No. 12, 1880; from *Virchow's Archiv*) observed a number of cases in which fatal poisoning occurred from chlorate of potassium given for medicinal purposes in diphtheria, etc. On account of the importance of the matter, Marchand subsequently undertook a series of experiments upon dogs, with a view to ascertaining the symptoms induced by poisoning with the chlorates.

When large doses were given, death occurred very quickly; post-mortem examination showed no changes excepting in the blood, which was chocolate-brown in color, not changing when exposed to the air. The various organs of the body were likewise brown in color to a greater or less degree, according to the quantity of blood contained. When death did not occur shortly the urine evidently contained blood, was dark brown and albuminous. In addition, cerebral symptoms, delirium, coma, and vomiting, supervened, which either gradually disappeared or grew worse, until a fatal result occurred. In these cases the

autopsy revealed marked alteration in the kidneys, consisting essentially in an almost entire plugging up of the canals of the pyramids by brown blood-cylinders. These changes are evidently due to an action of the chlorates upon the blood, these salts giving up large quantities of active oxygen to organic substances, and thus giving rise to an oxidation product of the coloring-matter of the blood, methæmoglobin, a body having a brown color with a characteristic absorption band in the red of the spectrum. As a result the blood-cells are disintegrated, and the product of this metamorphosis, being excreted by the kidneys, produces the obstruction above alluded to. Dr. Marchand gives full details.

Influence of Mineral-Water Baths.—At a recent meeting of the Académie de Médecine (*La France Méd.*, 1880, p. 212) Dr. De Ranse read a paper the conclusions of which are substantially as follows: 1. Baths at a temperature of 33° to 35° C. (90° to 95° F.), of ten to forty minutes' duration, in a mineral water containing not more than one grain in fourteen hundred and forty-five of fixed principles, produce, at the end of four or five days, general excitation of a physiological character, chiefly shown by more or less feverishness, nocturnal agitation, with languor during the day, digestive disturbance, and occasionally a slight eruption upon the skin. 2. In addition, a sort of excitation, with exacerbation of certain morbid symptoms, is observed in patients, this exacerbation affecting chiefly the dominant symptom of the disease, whether it be rheumatism, ataxia, neuralgia, or what not. 3. The period of this excitation is occasionally postponed later than the end of the first week, and occasionally it returns after the patient has recovered,—a sort of post-thermal crisis. 4. The cause of this action is not found in the thermal qualities of the water, nor in absorption and consecutive action on the organism of the mineral constituents held in solution, nor in an irritative and revulsive action of these constituents on the cutaneous surface. The cause seems rather to reside in a modification of the cutaneous innervation, and, secondarily, by sympathy or reflex action on the innervation of other systems or apparatus of the economy, in particular those affected by the disease. 5. It seems reasonable to attribute this modification of cutaneous innervation to a direct excitation of the nervous fibres of the surface of the skin, by the mineral constituents of the water playing the part either of physical or clinical excitants, or of both simultaneously. Future researches should be made in the direction of determining these elementary actions. 6. From a clinical point of view, the degree of thermal excitation cannot serve as an absolute criterion to estimate the effects of the cure. Generally speaking, however, it may be asserted that a lively and sharp excitation is a favorable prognostic sign.

Case of Purulent Osteo-Myelitis cured by Amputation of the Thigh and Antiseptic Cleansing-out of the Medullary Cavity.—Professor König (*Cbl. f. Chir.*, 1880, No. 14) had a patient, a man of 39, who had suffered for eight years with purulent inflammation of the left knee-joint, which at length entirely disappeared, but two years later, without apparent cause, returned. Resection was performed with antiseptic precautions, kept up for eight days, notwithstanding which purulent infiltration occurred, and the patient gradually came to present the appearance of a man suffering from septic poisoning. Amputation at the middle of the thigh was then practised, section through the femur showing a large purulent collection in the marrow. The question of exarticulation of the femur was suggested, but the patient's condition rendered such a serious operation unadvisable: so the stinking, suppurating marrow of the affected femur was scraped entirely out with a long-handled spoon; then cotton impregnated with concentrated solution of chloride of zinc was introduced in successive wads, the cavity being cleansed out with the most extreme care by means of these, until the last one used gave absolutely no smell of pus. The entire limb, with the wound, was then washed with a solution of chloride of zinc 1 : 30, and, after the introduction of a long double tube into the canal of the bone, the wound was cleansed and dressed antiseptically. A few days later, on account of renewed pus-formation, the wound was again opened and the bone cleansed out, after which the patient made a rapid recovery. All septic fever disappeared after the first operation.

Absorptive Faculty of Granulating Surfaces.—Maas, at the recent congress of German surgeons (*Cbl. f. Chir.*, 1880, p. 214), described his experiments on dogs

and men, in which he endeavored to ascertain how quickly certain materials, applied to granulating surfaces in solution, in the form of ointment, or dry, would enter, act on the organism (apomorphia, pilocarpin), or appear in the urine (ferrocyanide of potassium). The results are very interesting. Granulating surfaces treated with moist and warm dressings absorbed many substances more rapidly than fresh wounds. Crusts from burns or lunar caustic applications are actively absorptive, losing this faculty, however, when the crust has been exposed for ten hours to the air. The crusts from sulphate of copper, potassa caustica, nitric acid, and chloride of zinc absorb slightly or not at all. The crust forming upon wounds, treated by exposure, also absorbs little or not at all. On the other hand, granulating surfaces dressed antiseptically with carbolic acid absorb with great rapidity; but even these surfaces, if touched with solution of chloride of zinc, lose their absorptive faculty. Potassa caustica, sulphate of copper, nitric acid, tincture of iodine, and alcohol, all diminish the absorptive power; hot iron, pure carbolic acid, leave the surface unaltered; glycerin makes it more active.

Max Wolff made experiments, in 1870, on the resorption of corpuscular elements, and found that granules of carmine were taken into the circulation by granulating wounds.

Treatment of Progressive Septic Phlegmon by Multiple Incisions and Scarifications.—Kraske (*Cbl. f. Chir.*, 1880, No. 17), in an interesting article on this subject, says that all cases of phlegmon coming to Volkmann's clinic are, when amputation is not demanded, treated by multiple incisions and scarifications. When a patient with phlegmon comes to the clinic, the affected part is punctured and scarified by numerous small incisions, larger cuts being made where collections of pus are found, so as to permit free drainage. The rich, thick, yellow pus wells out abundantly from these bleeding and open points. When pressure by the hand ceases to cause exit of pus, the part is thoroughly washed out with carbolic acid solution, and the purulent cavities cleansed by means of an irrigator. The further treatment consists either of the application of wet carbolic acid compresses, which are changed at least twice a day, or the wounds are permanently irrigated by means of antiseptic fluids. The inflamed part is suspended or supported at as considerable a height as is convenient. Carbolic acid is unsuitable for continuous irrigation, on account of its poisonous properties. Salicylic acid is therefore usually substituted, although this has certain drawbacks. It often seems to disinfect only imperfectly, and gives rise to coagulations in the discharges which stop up the drainage-tubes and shut out the disinfecting fluid from the localities where its action is most desired. Possibly sulphite of sodium, acetate of aluminium, or some similar disinfectant might work better in such cases. By the procedure just mentioned, certain advantages are gained: as much as possible of the inflammatory products are removed, and thus are prevented from arousing phlegmon in fresh localities. At the same time the tension, and therefore the rapidity of absorptive power, of the other tissues is decreased, as are also the pain and the danger of gangrene. But the numerous punctures are not only points of exit for deleterious matters; they also render more easy the penetration of the disinfecting materials to the tissues, and consequently prevent excitation of fresh points of inflammation by effete material. The hemorrhage, also, which is often quite considerable, has a favorable influence in checking inflammation. Depletion of the overfull capillaries, with a rapid influx of oxygenated blood, results, which is much better calculated than the stagnant, deoxidized fluid, the place of which it takes, for the nourishment of the tissues and the restoration of disturbances of nutrition in the vascular walls.

The result of this treatment is striking: the temperature falls almost to the normal, and if it again rises it does not do so to excess, and soon falls again. Almost without exception the process changes its progressive character, the redness and swelling go down, and the parts resume their natural appearance.

Among the cases observed the number of those which showed little or no improvement was small.

The Causes of Death after Burns.—L. v. Lesser, in an elaborate article recently published in *Virchow's Archiv* (*Cbl. f. Chir.*, 1880, No. 16), details his experiments in relation to Sonnenberg's reflex hypothesis, according to which sudden death after burns occurs from reflex low-

ering of the vascular tone. Lesser's experiments and reflections lead him to the view that Sonnenberg's theory is erroneous, and that the processes occurring at the point of burning must be regarded as to their effect on the general organism. The theory of overheating of the blood is disproved by careful thermometrical observations: only those portions under the skin which has been burned show any rise in temperature, and these according to the thickness of this structure. The theory of death from suppression of perspiration is also without foundation. The changes which may affect the blood after its passage through the vessels of the burned tissues deserve especial mention. That these are important we may be sure from the high temperature found directly under the burned places, and also from the long duration of this elevated temperature. In fact, after extensive burning or scalding, marked changes take place in the red blood-corpuscles, numerous notched forms, etc., occur, and many rouleaux of red blood-corpuscles are found, as well as granular or dissolved blood coloring-matter, coloring the serum dark red.

When the patient survives, this free coloring-matter and the altered blood-disks are gradually eliminated through the kidneys. The parenchyma of the kidneys does not suffer essentially from this condition of affairs, though hyaline and epithelial cylinders are found. Extensive changes are found in other organs.

The overheating of the blood or the changes in it produced by exposure to heat are not such as to give rise to poisonous matters which may act unfavorably on the nerve-centres, however much its constituents may be altered. Blood-clots are often found in the heart, in various capillary vessels, particularly those of the intestine, with some sanguineous effusion, also in the muscular tissue, and in the serous membranes of the abdomen and thorax, particularly when the influence of the burning extends so far. In fact, the appearances are very similar to those found by Naunyn in his experiments on animals which had been frozen and thawed. The practical upshot of this paper is that antiseptics are to be used locally and transfusion employed early, if possible, but also late if collapse has set in. In addition the kidneys are to be aided in throwing off the load of effete matter.

INFLUENCE OF CANTHARIDES UPON THE UROPOIETIC ORGANS.—F. Shüler (*Cbl. f. Med.*, 1880, p. 181; from *Deutsche Zeitschrift f. Chir.*), after giving an historical account of the use of cantharides, adds a description of the toxic symptoms produced by this drug, the statement being based upon an analysis of fifty-seven recorded cases.

Disturbance of the sensorium, convulsions, unilateral paralysis and anæsthesia, vomiting, rectal tenesmus, tarry stools, pain in the bladder and region of the kidney, together with cramp of the vesical sphincter, were among the chief symptoms. Autopsy showed blebs and ulcerations in the mouth, hemorrhages and ulcers in the intestinal tract, parenchymatous and desquamative inflammation of the kidneys, hemorrhage into the bladder, with the formation of blebs, pseudomembranes, and ulcers in the latter. By injections of cantharides into the abdominal cavity or subcutaneously of cantharides, a simultaneous inflammation of the kidneys, the ureters, and the bladder could be observed: this was often so severe that the entire mucous membrane was loosened and separated.

ABNORMAL PIGMENT-FORMATION, AND ITS CAUSE.—Krocker (*Charité Annalen, Cbl. f. Chir.*, 1880, p. 220) describes a case similar to that of Litten, called "pigment-neurosis after typhoid." A girl 19 years of age, after having had a light attack of typhoid, showed variously-sized pin-head to pea-sized pigment-spots, which were of different shades of brown, and which began on the face and gradually involved the entire body except the back. The patches were mostly dark and large, and none of them were seen to disappear. The patient complained of palpitation of the heart, and an anæmic murmur could be perceived. Since similar spots occur in other anæmic persons, Krocker thinks that the disease is due to anæmia.

THE NEW PROFESSORSHIP OF DISEASES OF CHILDREN IN THE PARIS FACULTY.—Professor Parrot, who has been appointed to this position, has about two hundred beds in the Hôpital des Enfants at his disposal. He is an indefatigable worker. All the notes of cases he dictates himself; he also performs all the post-mortem examinations. A new lecture-room, together with a laboratory, has been placed at his disposal.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, MAY 22, 1880.

EDITORIAL.

THE PHARMACOPŒIA CONVENTION.

THE Pharmacopœia Convention which met last week, in Washington, may be considered to have been a success, and must, we think, have satisfied even Dr. Squibb that there is still vitality in the method which was inaugurated over half a century ago,—a vitality whose rejuvenescence we freely admit has been largely due to the exertions of Dr. Squibb himself, directed though they were against the old ways.

Nearly forty different incorporated societies and institutions were represented upon the floor of the house, and there was a sufficient earnestness on all sides to give life, if not acerbity, to the debates. It is true that the four great cities of the Atlantic sea-board contain the homes of nearly all of the delegates; but we opine that in these cities there is sufficient catholicity of sentiment to prevent the regrettable absence of other representatives from being destructive to the purposes in hand.

Dr. Amory, of Boston, who was selected as President of the Convention, filled his position with dignity and decision, and much praise is due to Dr. Judge, of Cincinnati, for the able and impartial manner in which he presided over the rather tumultuous meetings of the Committee of Thirty-Six, in which all of the work of the Convention was practically done. The arrangements of the Washington Committee of Reception were very excellent, and by means of a night session, which was protracted until 2 A.M., the Convention was able to avail itself of the excursion offered to Mount Vernon.

In regard to the general plan of the future Pharmacopœia, the propositions of the American Pharmaceutical Society were largely adopted. It was decided that all formulæ should be in parts by weight, excepting in so far that the Committee of Revision was permitted to employ the volumetric process for fluid extracts if, in its opinion, such process was the best. No doses and no toxicological or therapeutic information are to be allowed in the Pharmacopœia. The descriptions of drugs are to be much fuller than in former editions, and especial care is to be directed to the giving of all distinguishing characteristics and tests. Finally, the arrangement of the Pharmacopœia is to be purely alphabetical.

The Committee of Revision is composed of twenty-five members, and is competent to fill vacancies, also to create vacancies if members do not perform work. The only criticism to which it is open as regards its membership is in the absence of the chief medical therapeutic authorities of the country; in its pharmaceutical department it is very strong. It is composed as follows:

Dr. Ruschenberger, Dr. Wormley, Prof. J. M. Maisch, Prof. J. P. Remington, A. B. Taylor, Philadelphia; Charles Rice, Prof. P. W. Bedford, Dr. H. G. Piffard, Dr. E. R. Squibb, Dr. Castle, New York; Prof. C. L. Diehl, Louisville; Dr. T. F. Wood, North Carolina; Dr. Lawrence Johnson, W. S. Thompson, Mr. Parsons, Washington; Lewis Dohme, Baltimore; Dr. E. S. Wood, Dr. Robert Amory, Prof. Markoe, Thomas Doliber, Boston; Prof. J. F. Judge, Cincinnati; Dr. Wall, St. Louis; Dr. Gibbs, U.S.N.; Dr. Huntingdon, U.S.A.; Prof. Oldberg, Marine Hospital Service.

The idea is expressed that the meetings of the committee ought to be held alternately at New York and Philadelphia. This is very well, provided that the New York members of the committee are willing and

able to work. A large amount of valuable material for the revision was presented to the Convention, but almost all of it, excepting the volume of the American Pharmaceutical Association, came from Philadelphia. Professor Rice deserves the greatest praise for the labor he has performed as Chairman of the Committee of the American Pharmaceutical Association, but up to the present time the whole working power of New York City, so far as the Pharmacopœia revision is concerned, has centred in him. We trust this centralization will not continue. Boston was certainly much more active during than before the Convention. We trust that its representatives upon the committee will also labor in finishing the work already so nearly completed.

BROMIDE OF ETHYL.

IT is not often that a prophecy so soon meets its fulfilment as is the case with the predictions in the paper upon bromide of ethyl recently published in this journal.

Writing under date of April 13, and therefore before the issue of the number of the *Times* alluded to, Dr. A. Wellington Adams describes an accident which occurred during the administration of the new anæsthetic. The full report may be found in the *Hospital Gazette* of May 1, and we furnish only a short extract, with the statement that the bromide seems to have been used carefully and by competent hands:

"He [the patient] next relapsed into a quiet state bordering on complete anæsthesia, whereupon I hastily turned to where my instruments were lying, in search of that with which to begin the operation, keeping the while my fingers upon his pulse.

"While in this attitude, and engaged in fumbling over the instruments, which occupied but three or four seconds, I perceived a sudden cessation of the pulse, causing me to involuntarily turn and observe his appearance, which was that of facial cyanosis with both venal and arterial turgescence. The respiratory movements were imperceptible, the eyes turned upward and immovable in their orbits, the jaws locked, and the entire body somewhat stiffened."

Dr. Adams further states "that there was no stertorous breathing, no forced respiration,—in fact, none of the symptoms of asphyxiation."

Recovery occurred in a few minutes, but the case certainly confirms the asserted resemblance of the action of the bromide to that of chloroform.

CORRESPONDENCE.

LONDON LETTER.

THE elections have passed away with a certain percentage of sudden deaths, but with little general excitement. Two medical men have been returned to the new parliament,—Dr. Lyons, for Dublin, and Dr. R. Farquharson, for West Aberdeenshire. The latter is well known to the profession from his numerous contributions to medical literature and his work on therapeutics. He is an assistant-physician to St. Mary's Hospital and Lecturer on Materia Medica in the school there. He is also the representative of an old family in Aberdeenshire. He is a man of character, and will make a most excellent representative of the profession at St. Stephen's,—a thing much to be desired. As at once a medical man of reputation and a landed gentleman, he is therefore in a very good position to look after medical interests, and his opinion will carry weight with it in medical matters and when the next medical bill is introduced, which, with all the other matters to be attended to, is not likely to be soon. Nor is it at all desirable that any medical bill be essayed until the profession knows its own mind on the subject a little better than it does at present. The government which put its foot down on scientific inquiry in England by passing the Vivisection Act has gone to its unhonored grave without any professions of regret on the part of the physiologists of Great Britain. The country gentlemen who passed "the Conservative Sportsmen's Bill, to prevent the liberal physiologist from inflicting pain upon animals," are for the present rusticated very efficiently, and so prevented from further mischief,—at least for a time.

A trial has just taken place here which is interesting in many respects to the profession. On the downs south of London, near the famous Epsom race-course, stands the Epsom College for the Education of the Sons of Medical Men. It is an institution of repute, and the education given there is solid, and of a kind peculiarly adapted for boys who intend or are intended subsequently to enter the profession. The particulars are briefly as follows. A certain Dr. Howell had had several sons at this college, and had, or thought he had,

some cause for dissatisfaction against the ruling authorities of the institution, which is managed by a council. This council governs the place, but allows the head-master to have boarders in his house. So Dr. Howell arranged with Dr. West, the head-master, that the next boy he sent there should be taken into his house as a boarder, so as to be under his personal supervision. All went well until, unluckily, this youth acquired scarlatina. Now, scarlatina is a well- and generally-recognized infectious malady, and, when it appears in a school, causes much dismay among those who possess any responsibility therein. So, when there was no longer any doubt about the nature of the malady, the medical man in attendance advocated, as is now the rule, isolation, in order to prevent the spread of the disease. The college has an infirmary attached to it for the receipt and treatment of these infectious cases, but, of course, in the head-master's house there was no infirmary, and, as isolation was the predominant idea, it was determined to send young Howell to the college infirmary, where, unfortunately for him and all concerned, he died. The father was enraged at this, and brought an action against the head-master. The English law, unlike most European codes, recognizes nothing but manslaughter or acquittal where there is alleged misconduct which leads to the death of any person. Well, Dr. Howell did not prosecute Dr. West and his auxiliaries for manslaughter, which would have been a very serious affair, if it would have been practicable at all, but entered upon a civil action. It appeared in evidence that when the medical attendant of the college, Mr. Jones, had diagnosed scarlet fever, he decided that the boy should be removed from the room he ordinarily and then occupied, as it was too small for proper ventilation. He suggested the removal of the boy to the infirmary. Dr. and Mrs. West demurred at this, as there was the agreement that the youth should be under personal supervision, and that would be impossible if he were removed. Mrs. West was personally unacquainted with the infirmary, while the doctor was not conversant with its condition, as to whether it was in a fit state for patients to be sent into it or not. Here comes the unfortunate part of the whole business; and, as the same thing, as regards its broad outlines, may occur again very readily, it is desirable to review somewhat critically what was done. The doctor's orders were carried out, and the boy was removed. His mother had previously been made aware that the boy was sick; now the father was informed of the state of matters, as regarded the nature of the illness and the removal of the boy to the infirmary.

The question raised before the jury, as to whether the person to whose charge a boy is intrusted is legally justified in transferring that charge to another without the permission of the trustor, and decided by them in the affirmative in this case, does not concern us here. It is the medical aspect of the case which is important. It is alleged by Dr. Howell that the infirmary was not in a fit state for the reception of patients, and in this he is supported by his wife and his son, also a medical man. They assert that the infirmary was damp, cold, and draughty, and that there was only a fire lighted in it a few minutes before the boy's removal to it. By the defendants it was admitted that the infirmary, or, anyhow, that part of it occupied by young Howell, was not in the condition it might have been in. Some pipes had burst, and were being mended. Probably it was not regarded as any part of Dr. West's duties as head-master to see to the infirmary, which was under the government of the council; still, it was a very unfortunate fact that the infirmary was not in a fit or, at least, desirable condition for the receipt of patients. Probably the death of the patient was largely attributable, as asserted by his father, to the unprepared condition of the infirmary. But the essence of the question lies—for us at least—in this: Was it necessary so precipitately to remove a scarlatinal patient to a chamber in a questionable condition? This question must necessarily crop up from time to time. The removal was not undertaken for the good and benefit of the patient; it was unquestionably for the protection of the other inmates of Dr. West's house. But, surely, the risk of infection and the risk to young Howell's life should have been very carefully balanced before a decision was arrived at. The idea that a room can be aired by a fire lighted a few hours before it has to be occupied is prevalent. Any one of any experience as a country doctor knows well how often this is done, and the outcomes thereof. To air a room, a fire—and a good one—should be burnt the whole of the previous day, and be well banked up with coal or coke at bedtime, and left to burn as far as it will into the night; it should be set agoing again next morning early, and then, in a few hours, a patient might safely be taken into the chamber. And this was the more imperative in this case, where a disused building was to be got ready for a sick boy just after inclement weather. On the other hand, the infectious stage of scarlet fever is towards its later stage and early convalescence. Without saying that Mr. Jones is in any way to blame for his decision, it would seem that if the boy had been kept where he was for twenty-four hours, little harm would have been done to anybody, and probably all this trouble would have been avoided. No doubt if the disease had spread in Dr. West's house Mr. Jones would have been censured for carelessness; but, as it is, a much more serious *esclandre* has been occasioned. It is undoubtedly a

difficult matter to decide on immediate action in times of emergency, and to foresee clearly all possible consequences; but, as such a decision will have to be come to by members of the profession, in similar cases, more and more frequently, the lesson of this case may stand them in good stead in the future.

We all suffer at times from some medical fashion, just as ladies do from their fashions in dress; and now it is certainly the fashion to isolate infectious disease and so arrest its spread. Undoubtedly this is very desirable; but then the risks run by the actual patient must not be either forgotten or under-estimated. If in this case any error was committed, it has been atoned for by the vexation, the expense, and the exposure of a trial, which must be injurious to the institution, which is a valuable one. Remote contingencies are not kept well in view by the bulk of humanity; I do not know, indeed, if the individual who will insist upon these contingencies being constantly remembered is not rather an unpopular person, and his warnings regarded as the outpourings of an inordinate self-conceit anxious to air its own cleverness. And so this unforeseen contingency at last crops up, and then disaster follows, and upon its heels exposure and discredit. A man drops overboard from a ship, and then it is found that it is next to impossible to let down a boat, and before this can be done the man sinks; great energy is then displayed in attending to the boats, but all is forgotten by the next time there is a man overboard. So, no doubt, with college infirmaries. But where the chambers for the reception of fever-stricken patients are in a questionable state, the matter of the dangers of removal *versus* the risks of infection must be balanced before any decision is arrived at; and in every sense it seems unfortunate that young Howell was not kept where he was for another twenty-four hours, until the infirmary was got ready for him. Seen by the light of after-events, this is very apparent; what was indicated at the time the decision was arrived at is not so clear.

The subject of hemorrhage from the female genital organs is discussed by Dr. A. V. Macan, of Dublin, in a very complete and thorough manner. He considers carefully the production of hemorrhage in cases of placenta prævia, and shows that the idea that "during the first stage of labor the cervix becomes retracted or shortened" is an error. "This is quite contrary to what is really the case, for the length of the cervix, instead of being in any way taken up or retracted, is, on an average, doubled during the first stage of labor, and its circumference is increased from that of the finger to that of the fœtal head." This is beautifully shown by a section made by Braune on the frozen body of a woman who died at the end of the first stage of labor. In speaking of the treatment of this serious condition, which is one of the *bêtes noirs* of a general practitioner's existence, he says, "Our great object should be to separate the membranes freely from one edge of the placenta. If the cervix be dilated and the presentation partial, this is readily accomplished, and, once it is done, the placenta is free to move upwards and outwards along with the lower segment of the uterus, to which it is attached, and the hemorrhage ceases. If the presentation be, however, complete, we must first separate the placenta at one side or other from the uterus,—if possible, from that side to which it has the smallest attachment. If it be doubtful on which side the smaller segment lies, then we should, with a view to future turning, separate it at the side where we find, by external examination, that the legs of the child are situated. If we be unable to reach the membranes, and the hemorrhage be formidable, we must plug until the membranes are within reach; and if any considerable portion of the placenta overlap the inner os, we should turn as soon as practicable, in the interest of the child. In no case of partial presentation should any artificial separation be attempted, for we can never tell the exact amount of separation that may be necessary to allow the inner os to become fully dilated. The only circumstances that justify the artificial separation of the placenta are where the presentation is complete, where it is done to convert the case into one of partial presentation, or in those rare cases where the total separation of the placenta may be advisable before the birth of the child."

Sir James Simpson advocated the plan of the removal of the placenta bodily, and then the extraction of the fœtus by turning. Whatever has to be decided upon, there are few emergencies more trying than to find a case of placenta prævia in the country, miles away from any other medical man. The consciousness of the weight of responsibility, the necessity for immediate action, the issues at stake, produce a condition of mental tension which is very trying. To be thoroughly conversant with the management of the graver complications of labor is the only plan which will keep the practitioner's conscience at ease. A grave surgical operation has very rarely to be performed without consultation, but at any moment a most serious complication in labor may present itself,—so serious as to threaten the lives of both mother and infant,—which will tax to the utmost the energies and presence of mind of the practitioner. Fortunately, midwifery is very fairly taught at all schools of medicine now; but the student must be made aware that there is no peace of mind in practice without a thorough and efficient acquaintance with the complications of natural labor. An ignoramus may have luck and scramble through life without an accident occurring, but such experience can-

not be common. For a mother to be lost in labor is a very painful thought to every one, and the laity are very censorious, and rightly so, when such a catastrophe does occur.

In his consideration of the hemorrhages of the early months of pregnancy, Dr. Macan says nothing of the use of ergot to arrest the hemorrhages without necessarily producing abortion. Some little time ago, in conversation about the use of ergot, Dr. Angus Fraser, of Aberdeen, told me that he had frequently used ergot to arrest uterine hemorrhage in pregnancy, and that he often found it arrest the bleeding without procuring the expulsion of the ovum. I am not aware that this use of ergot is generally known; but it is very desirable that such knowledge should obtain generally. At the worst, abortion can only take place, and in the early months of pregnancy the life of the ovum cannot weigh seriously against the life of the mother.

There are, too, women in whom scarcely anything could produce abortion. An accident which may seriously endanger life leaves the ovum undisturbed, and the pregnancy progresses; and in such women the use of ergot in hemorrhage from the uterus is clearly indicated. Others there are, again, in whom the slightest thing is sufficient to induce abortion. It is a great matter for the youthful practitioner to learn this distinction, and to act accordingly. Some parents are very touchy on the subject of the loss of any of their progeny, no matter how immature; and in the struggle for existence it is well to avoid every source of resentment or enmity.

J. MILNER FOTHERGILL.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, FEBRUARY 26, 1880.

THE PRESIDENT, DR. S. W. GROSS, in the chair.

(Continued from page 415.)

Intra-ocular tumor. Presented by Dr. C. B. NANCREDE, from Dr. ALBERT G. HEYL.

THE patient, Miss C., æt. 48, from whom this specimen was taken, applied for treatment at the eye and ear department of the Episcopal Hospital, February 16, 1880. The clinical history is as follows:

About one year ago the patient noticed that the sight of the left eye was affected; she was not aware of any pre-existing inflammation in the eye, or of any injury to the organ. About three months ago a violent attack of inflammation of the eye occurred, characterized by great pain, exophthalmos, injection of the conjunctiva; for this she was treated antiphlogistically by Dr. J. R. Weaver, of Norristown, Pa. The acute symptoms subsided, but the eye ever since has been more or less irritable, and at times painful. At Dr. Weaver's suggestion, she finally consulted me. The examination of the eye resulted as follows:

R. E., V = $\frac{20}{20}$. No abnormal appearances in the fundus.

L. E., entire loss of sight. Eyeball shrunken, presenting the condition known as phthisis bulbi. The conjunctiva somewhat injected. The sclerotic dimpled in two places, near the ciliary region, in the upper inner quadrant, as though bands of connective tissue in the interior of the ball had dragged upon it. Ball tender to touch in one or two points, but not generally sensitive. Anterior chamber shallow; pupil dilated; lens completely cataractous; at the position of the anterior pole, and within the capsule, a small black body about the size and shape of a canary-seed.

The removal of the eye was advised, and accomplished on February 17. The enucleation was attended with a little difficulty, owing to the matting together of the tissues about the insertion of the muscles.

After removal of the eyeball, the cornea, which was found to be greatly thickened, was cut away, in order to examine under the microscope the black spot in the lens.

The sclerotic, in addition to the two indentations already spoken of, had also a deep sulcus near the equator bulbi, apparently due to the retraction of the interior structures. An equatorial cut was made through the sclerotic. It was then found that the interior of the eye was composed of a tough, blackish mass, between which and the sclerotic a cavity existed, apparently due to the contraction which this interior mass had undergone. This mass was adherent about the optic disk; possibly also in the ciliary region, but to a very slight extent, as the anterior half of the sclerotic separated from the interior mass with very little traction. The depression in which the lens lay was perfect in shape; the posterior capsule could be peeled from it. The lens was of the consistence of very thick gruel.

Report of the Committee on Morbid Growths.—"A thin section of the new formation developed in the eye upon microscopic examination is seen to be made up entirely of spindle-shaped cells, the protoplasm of which is densely pigmented with minute granules of black pigment. The blood-vessels are embryonic in character. The growth is a spindle-celled melanotic sarcoma.

"March 25, 1880."

AN EMETIC FOR INFANTS.—A correspondent of the *British Medical Journal* states it as his experience that half a teaspoonful of glycerin acts as a simple and efficient emetic for infants.

REVIEWS AND BOOK NOTICES.

SURGERY IN THE PENNSYLVANIA HOSPITAL. By THOMAS G. MORTON, M.D., and WILLIAM HUNT, M.D., Surgeons to the Hospital. With Papers by JOHN B. ROBERTS, M.D., and FRANK WOODBURY, M.D., late Resident Physicians in the Hospital. Prepared by direction of the Managers of the Hospital. J. B. Lippincott & Co., 1880.

There is probably no general hospital in the United States in the wards of which can there be found as many and as great a variety of interesting surgical cases as in the old Pennsylvania Hospital: hence there is no school which affords greater facilities for the study of practical surgery than this institution.

This fact being generally conceded, consequently anything relating to the practice of the hospital emanating from the members of the surgical staff immediately commands the attention of the medical profession. In 1868 and 1869 two volumes of "Reports" were issued by the staff of the Pennsylvania Hospital, but were discontinued, not on account of a deficiency of instructive material, but for the very good reason that the enterprise was a pecuniary failure. The editors of the present volume have done wisely, perhaps, in selecting the above title for their work, but, so far as we have been able to determine from a hasty inspection of it, it seems to us that the difference between this work and the Reports of 1868–69 is rather in the title than in the character of the contents. A work designed to give a general idea of the surgical practice of a large hospital, as we would naturally infer was the aim of this volume, if its title fairly represents its object, should be rather more comprehensive in its scope than this appears to be. Every surgeon who has been, or is at present, connected with the hospital has done work which has been of more or less value, and consequently, if published, would be of decided interest to the profession at large. In the "Surgery in the Pennsylvania Hospital," however, we will find papers of decided merit on various topics, but these papers will be found to represent or give expression to the views of the writers themselves rather than to those of the entire surgical staff. If, therefore, one who is not intimately acquainted with the practice of this institution expects to get, by a perusal of the contents of this volume, a general *résumé* of the surgery of the hospital, he will be doomed to disappointment.

On pages 274–6 there are a description of two modifications of Malgaigne's hooks, illustrated by five wood-cuts, and the reports of cases of fracture of the patella treated with them. No one will deny that by means of this apparatus accurate apposition of the fragments of a broken patella can be secured and bony union possibly obtained; but that their use is free from the risk of exciting inflammation of the knee-joint and, as a consequence, jeopardizing the integrity of the joint itself, and possibly the life of the patient, their most devoted advocates will hardly venture to maintain. Only one other method—Professor Agnew's—of treating fracture of the patella is noticed, and his apparatus is disposed of in a single paragraph of four lines and a half.

It may be of interest to state that the modification of Scarpa's club-foot shoe, of which there is a wood-cut on page 239, was the suggestion of a non-professional gentleman, who is at the head of one of the large iron-works of this city. The apparatus was made by one of his workmen, but to Dr. Morton is due the credit of having first called the attention of the profession to its supposed advantages in the management of club-foot.

The abdominal tourniquet figured on page 14 is incorrectly called Professor Pancoast's. This instrument was devised by Skey, and Professor Pancoast modified it by placing an additional compress on the compressing pad so that the aorta might be controlled without the vena cava being included.

On page 16 we are introduced to a new term, *i.e.*, the use of the noun section in the sense of a verb. We are hardly prepared, however, to accept this verbal innovation as an improvement on the term ordinarily employed to express the division of a bone by a saw.

Much that is contained in this work has already been published elsewhere; yet, since it comprises a part of the record of the practice of the hospital, it very properly finds a place in this surgical *résumé* (?).

The statistics appended to each paper are of great value, and, apparently, have been arranged with much care.

The publishers have done their portion of the work in a very creditable manner.

A HAND-BOOK OF PHYSICAL DIAGNOSIS. By DR. PAUL GUTTMAN, Privat-Docent in Medicine, University of Berlin. Wm. Wood & Co., New York.

There is no such word as fail. This seems to resound in the ears of the rising physician, leading the gynæcologist to devise new forms of the speculum or forceps, and the clinical physician to add a new work on physical diagnosis to medical literature. After reading most of the works on this subject our reflection usually has been,—

> "Oh, wad some power the giftie gie us
> To see oursels as others see us!
> It wad frae mony a blunder free us,
> And foolish notion."

Our author claims as the peculiar excellence of his work its peculiar systematic arrangement of the subjects treated.

Now, this is to us the chief objection to the

book, which contains many most interesting observations. To our mind the basis of classification should be the physical conditions which dominate the production of physical evidence, and then the various signs elicited by the various methods of examination should be detailed, so that the mind, being aroused to interest by the statement of the governing principles, may be more readily impressed. Dr. Guttman has chosen to detail with, we think, accuracy the symptomatology of physical diagnosis, and yet the book reads like a catalogue or a dictionary. For this reason we think that those of the profession who have not been trained by hospital experience to habits of minute analysis of cases will find this work unsatisfactory.

For medical students the book is not desirable, as the essentials are not broadly laid down, distinct from details which, though interesting, are confusing to a beginner.

Then some most important points are hastily passed over, for instance, the matter of cardiac and aneurismal murmurs, while the observations on pericardial murmurs are particularly well chosen. The work contains a section on the examination of the urine. Perhaps the writer counted on exciting the enthusiasm of his readers on the Spanish bull-baiting principle by the exhibition of a page of beautifully colored representations of chemical reactions, and this would make them excuse all deficiencies. He has endeavored to condense his material to a degree which has led him to omit all consideration of a substance like urea; to state without qualification that every urine containing casts is albuminous. Eighteen pages are devoted to the subject of laryngoscopy, and this section is well written, containing useful information for medical men who do not expect to become operative laryngoscopists.

We would commend the many useful observations of the author, who must have written this book as the outcome of careful clinical observation, and yet deprecate the plan of incorporating so many branches of special investigation in one volume, which we believe has only been successfully done by one author, and he a native of our city. E. T. B.

The Relation that the Circulation and the Animal Heat bear to Each Other in Disease.

We have received a most interesting and, we think, valuable pamphlet of thirty-eight pages from the author, Dr. Ignacio Alvarado, of Mexico, on "Las Relaciones que hay entre la Circulacion y la Calorificacion en las Enfermedades." Dr. Alvarado has studied his subject very closely, and has observed several diseases,—especially, so far, *yellow fever*, the excellent researches on which are given in his essay before us.

After a thorough consideration of the relation that the circulation bears to animal heat from a physiological stand-point,—having minutely examined the works of Traube, Cl. Bernard, Lorain, Marey, Liebermeister, Vulpian, etc.,—he enters the field of pathology, and finds that a similar relation of the two functions occurs in disease. He has, firstly, made a physiological study of the relation existing between the degree of heat and the number of pulsations among people living in the localities of Vera Cruz and the city of Mexico. In the first city he found the normal heat of the body from 36.5° to 36.9° C., the number of heart-beats being from 70 to 74. In the city of Mexico the body-temperature was about 37° C., never above 37.4° C.; the pulse about 75, never going higher than 80. For convenience of study, he divides the number of pulsations by the degree of heat in normal and abnormal cases, and finds that the quotient generally bears a certain relationship. In the physiological state he finds, then, that for the rise of every one-tenth of a degree of heat there is a proportionate increase of one heart-beat. For instance, a temperature of 37.5° C. corresponds to 80 pulsations; 38° C. to 85; 38.5° C. to 90, etc. So that if the normal amount of heat were 39° C., the normal pulse would be 95; if the temperature were 41.5° C., the heart would beat 120 times per minute.

These results, as such, as Dr. Alvarado himself remarks, are of no value whatever. It is, therefore, necessary to compare one quotient with another, which, being invariable, is taken as a unit of measure. In such instances, of course, the difference between both would express the pathological relation; then we would appreciate the value of any quotient. If we are ignorant of this fact, a patient, for example, having 135 pulsations and 36.5° C. of heat, we would have as the quotient 3.69°, the value of which we would not know how to appreciate. But if we know that 1.91° is the quotient that physiologically corresponds to 36.5° C. of temperature, then, of course, the number 3.69° would signify a great deal. If the patient, again, only had 40 pulsations and the same temperature already named, the quotient would only be 1.09°, which, compared with 1.91°, would give us the difference existing between the pathological and the physiological state. So that the unit of measure for a temperature of 36.56° would be 1.91°, a unit which, however, will not do for other temperatures. It was found necessary, then, to get a unit for each temperature in the normal that would compare with the pathological state. The quotients that correspond to the temperatures physiologically, and with which any quotient found in disease can be compared, are the following: 1.80° for 36°; 1.91° for 36.5°; 2.02° for 37°; 2.13° for 37.5°; 2.23° for 38°; 2.33° for 38.5°; 2.42° for 39°; 2.52° for 39.5°; 2.62° for 40°; 2.71° for 40.5°; 2.80° for 41°; 2.89° for 41.5°.

Dr. Alvarado then constructs two tables, one of which he calls "Table of Quotients," and the second "Table of Differences," which he uses to study his subject from a pathological point of view. By the use of these two tables we are enabled to study the relation of the two functions in question, normally and pathologically: in the first we study the amount of the relationship, and in the second the difference there is in normal and abnormal cases. There is another table constructed which is still more practical. In this the number, according to certain arrangement, represents the relation under observation, and at the same time it also expresses in degrees of heat the thermo-circulatory difference between a normal and an abnormal case, both presenting the same number of pulsations, as in the following instance. Suppose a patient has a pulse of 90 every day for three consecutive days, but a temperature of 38° C. in the first day, 37.5° C. in the second, and 38.5° C. in the third. The difference in the first day would be expressed by 0° C., because 38° C. of heat corresponds, physiologically, with 90 pulsations; on the second day, however, the difference would be expressed by —0.5° C., because he has then half a degree of heat less than the amount of temperature corresponding with a pulse of 90; on the third day the difference would be +0.5° C., for the reason that then he has five-tenths of a degree in excess of the amount of temperature corresponding with 90 heart-beats, and so on. This table Dr. Alvarado calls "The Table of Thermo-Circulatory Indices."

By means of these three tables Dr. Alvarado has studied disease in its various forms, with especial regard to the subject under consideration, and has applied this mode of investigation to a close study of yellow fever, upon which the author is at present writing a book. The pamphlet before us shows many patient observations on that dreadful disease, and his researches we have no doubt have been most accurate, stained with no tinge of partiality.

He has studied those cases that proved fatal as well as those that ended in recovery, excluding those in which a remittent type of the disease was present. He divides the disease into three stages, those of "ascension," "fastigium," and "descension:" to each of the first two stages he allowed three days, and to the third five days.

It is to be borne in mind, according to the third table, that the "indices" have either a + or — sign, and that each of these indices represents a certain relationship between the pulse and the temperature. In his observations of the malady under consideration he found that if the positive sign of the indices predominated in the stages of ascension and fastigium, the condition of the patient was generally unfavorable, but favorable if these signs were seen in the third stage, and *vice versa* with regard to the negative sign. It is found, then, that the positive sign expresses the preponderance of the temperature over the pulse, and *vice versa* with the negative sign. This rule, with regard to the signs in the different stages of yellow fever, the foreteller of a favorable or unfavorable result, is invariable, according to Dr. Alvarado, in the majority of cases, and he firmly believes that this new mode of investigation can be practically applied, and with advantage, to the study of other febrile diseases. His general conclusions are as follows: 1. In health there is a relationship between the pulse and the temperature. 2. A similar thermo-circulatory relationship exists in disease. 3. Of course this relationship, in either case, is not an absolute, but a proximate one. 4. The relationship can be known in a general way, but can be demonstrated by the method of "the quotients," made valuable by the method of "differences," and utilized in practice by the method of "indices." 5. These three methods constitute a *new way* of clinical investigation of easy and simple application. 6. They are as applicable to the study of any febrile disease as they were to that of yellow fever. 7. They have been of great utility in the disease already considered, and can, without doubt, be of great advantage in the study of other affections, and without exception in febrile diseases.

We have thus given the substance of Dr. Alvarado's pamphlet, which contains much original matter illustrative of the very interesting subject. On the whole, we can say that his essay does him a great deal of credit. We anxiously wait for the appearance of his work on yellow fever. D. C.

OBSERVATIONS ON FATTY HEART. By H. KENNEDY, Fellow of the King and Queen's College of Physicians in Ireland, Physician to Simpson's Hospital, and the Whitworth, Drumcondra, and Sir Patrick Dun's Hospitals.

In the dwellings of the period we find many articles without intrinsic usefulness or beauty, but which, in modern parlance, are termed *bric-à-brac*.

This little work on fatty heart might be assigned a place among the *bric-à-brac* of medical literature. There is a flavor of garrulous speculation and a musty odor of antique methods of study, which appear to be the outcome of clinical observation unaided by the possession of modern scientific acquirements on the part of the observer. The portion of the book devoted to pathology shows apparently that the writer has not been accustomed to the use of the microscope. He has suspicions that "he has seen cases where atheroma was, or seemed to be, the result of inflammatory action." He appears to doubt that the medical public appreciate the causes of fatty degeneration from deficient vaso-

motor tonus, etc., and he elaborately discusses whether the slow pulse, in some cases of fatty heart, may not be due to fatty degeneration of the pneumogastrics, more especially the right!

There are some accounts of his ability to detect by percussion accumulation of fat behind the sternum and around the heart!

We can commend some very just observations upon the altered character of valvular sounds in fatty infiltration and degeneration. There is also a claim for a peculiar pulse,—a fulness without much force in the percussion-stroke, especially in fatty infiltration. A section is also devoted to prognosis and treatment.

On reading the book one is at a loss to say why it has been written. There is always a demand for accurate descriptions of disease and generalization upon established facts, but no room for speculative theories. E. T. B.

SORE THROAT: ITS NATURE, VARIETIES, AND TREATMENT. By PROSSER JAMES, M.D. Fourth Edition, pp. 318. Philadelphia, Lindsay & Blakiston, 1880.

This little book, which has gone through four editions since 1860, is sufficiently known to the medical public not to require at this time an extended notice. Its author is recognized and respected as a well-qualified practitioner in the department of laryngology. No better guide can be followed. His views of the nature of sore throat are sound, and those of treatment conservative. The work is well illustrated by six semi-diagrammatic figures in the shape of copper-plate impressions colored by hand, as well as by a number of wood-cuts. The first-named feature is distinctive of the present edition, and takes the place of the lithographs of the previous ones.

COMMON MIND-TROUBLES AND THE SECRET OF A CLEAR HEAD. By Dr. J. MORTIMER GRANVILLE.

Popular essays. Feeble.

GLEANINGS FROM EXCHANGES.

DEFECT OF THE CEREBELLUM OCCURRING IN A BROTHER AND SISTER.—Dr. Donald Fraser (*Glasgow Med. Jour.*, March, 1880) gives notes of the following cases. The first was that of a young man employed as a paper-carrier. He walked with the gait of a drunken man, reeling very much, his body inclining forward, head thrown back, mouth open, and eyes inclined upward, apparently in constant danger of falling upon his face, though he fell but seldom, and was able to walk considerable distances. Later, he grew worse, and often fell. He was able to walk but short distances, and would stand for hours leaning against a door-post, his body stooping forward and swaying, his head thrown back with a constant nodding motion, as if it were too heavy for his neck, so that he had difficulty in balancing it. His general health was good, and there was no indication of mental unsoundness. Some of his movements seemed choreiform, but could be made as well with the eyes shut as open. As a child, he had been apparently healthy for the first year or two, and then began to reel and stagger slightly, growing worse from year to year.

The sister presented symptoms generally resembling those of the brother. There was a family history of tendency to disease of the nervous system. The brother dying of phthisis, post-mortem examination showed nothing remarkable in the brain and cord excepting a very small cerebellum. Its weight, when separated by cutting through the peduncles, was two ounces and five drachms (one thousand two hundred and sixty grains). The changes were—(1) the cortical gray substance of the cerebellum was little more than half its normal thickness, and there were gaps at the surface, probably caused by collections of fluid in the soft membranes; (2) the white substance presented little apparent reduction, and, in proportion to the gray substance, appeared of undue thickness; (3) the cells of Purkinjé in the cortex were greatly shrunken and contorted, their processes being indefinite and altered in direction.

Dr. Fraser gives various other facts, especially relating to the sister's symptoms and to records of similar cases.

THE INFLUENCE OF MERCURY ON THE COURSE OF SYPHILIS IN CONNECTION WITH SO-CALLED MERCURIALISM.—From a review of a recent work by Vajda and Paschkis, in the April number of the *Archives of Dermatology*, we learn that these writers give the results of the chemical and clinical investigation of one hundred and ninety-eight cases of syphilis, with a view to establish on an objective scientific basis the relations of mercury to that disease, with special reference to the opinion held by the so-called "anti-mercurialists" that late or tertiary manifestations are produced by the drug. The majority of anti-mercurialists claim that the late forms of syphilis are the result of the combined effects of mercury and the syphilitic poison, either through their union to form a new virus or without it. The minority (among whom are Hahnemann and Virchow) regard late manifestations as consequent upon the action of mercury and syphilis at different periods,—either that the mercurial action first produces a cachexia which permits the development of the lesions, or *vice versa*. In order to explain the lapse of time between the primary and tertiary stages, they assume, and in some instances have proved, the persistence of the drug in the body.

To prove the truth or falsity of this view the authors have resorted to chemical analyses, examining urine, placentæ, milk, saliva, bones, fœtal tissues, menstrual blood, and the

discharge from gummy tumors. Their results are given in one hundred and seventy-one pages of tables, comprising sixty cases in which mercury was given and afterwards found, and forty-four in which it was not found; fifteen cases in which it was said to have been given and was found, and forty-four cases in which it was not found; five cases in which it was said not to have been given and was found, and thirty-one not found. The possibility of mercury remaining in the body long after its use has been discontinued was thus settled beyond a doubt, it having been found in some of the excreta in forty-two per cent. of the cases examined, in one as late as thirteen years after suspension of treatment.

In order to determine whether late syphilis could be attributed to the effects of mercury, sixty-three cases of tertiary lesions were examined, and in forty-five of these the drug was not found. The authors, therefore, conclude that a causal relation between mercury and syphilis does not exist.

In addition, the results of some of the investigations lead the authors to the belief that the beneficial effects of the iodide of potassium in late syphilis cannot be attributed to its power of causing the elimination of mercury.

NUTMEG-POISONING. — Under the title "Accidental Proving of Nux Moschata" Dr. Howard gives, in the *Hahnemannian Monthly* for February, an account of a young married lady who took, for the purpose of bringing on delayed menses, an ounce of finely powdered nutmeg in half a pint of whisky. The dose was swallowed before retiring, and the patient soon fell asleep, but was awakened a little later by præcordial anxiety and an intense burning sensation at the pit of the stomach. She soon sank into a semi-unconscious condition; the pulse 130, respiration oppressed, face ashy pale, and eyes sunken. Understood questions, but stopped as if forgetting in the middle of an answer. Her intellect was impaired; objects seen appeared multiplied. The head felt enlarged and as if drawn back, the head swam, and there was a sensation of throbbing all over the body. The severe symptoms were relieved by the administration of coffee infusion. There was a good deal of pain in the ovarian regions for several days; the bowels were freely moved. There was profuse urination, with a strong smell of nutmeg, and she had a profuse, greenish, acrid, leucorrhœal discharge. The looseness of the bowels was followed by costiveness, with apparent loss of expulsive power in the intestine; also deficient power of deglutition. There was a peculiar sensation as of some one scraping the back between the shoulders. Dreams of sexual excitement occurred for some days during sleep, followed by exhaustion and a swollen sensation in the ovaries. Stammering was noticed for some time. All these symptoms gradually diminished, and finally disappeared. The catamenial function was not restored.

EXPERIMENTS WITH PEPSIN AND PANCREATIN.—Dr. F. Arnold Lees, in a paper published in the *British Medical Journal*, March 20 and 27, entitled "Therapeutical Experiences with the Digestive Ferments," speaks of Savory's saline essence of pepsin and pancreatin and Bullock's acid glycerin of pepsina porci as the most successful preparations of the kind. He has used them with better result than previously attained in the debility of convalescence, ordering a cupful of beef tea or chicken broth or mock-turtle soup, with which, about half an hour previously (whilst kept warm near the fire), two or three teaspoonfuls of Savory's essence have been mixed. The soup is hardly altered in taste, and sits well on the stomach. In the afternoon, milk gruel treated with a drachm of each of the essences, or pure milk which has been boiled for a minute or two, and then, after partially cooling down, has been vigorously shaken in a bottle with a drachm of each essence, and drunk foaming, has been given with advantage. In abdominal phthisis and other diseases associated with wasting and malassimilation of fat, this sort of improvised koumiss is of advantage. In vomiting from irritable stomach, Dr. Lees finds no remedy so seldom disappointing as Savory's saline essence, either given neat and followed by meat juice or milk and soda-water, or given along with concentrated albuminous fluids, as Brand's meat jellies or koumiss. In infantile or childhood's ailments, Dr. Lees finds Bullock's acid glycerin of pepsine of inestimable value, in the vomiting of so-called infantile remittent fever, infantile tuberculosis, tubercular meningitis, and those forms of infantile atrophy with diarrhœa dependent upon disagreement of milk foods. He cuts off milk entirely, and gives meat juice with the peptic glycerin, and cream with the twentieth part of its weight of pancreatin mixed up with it. In vomiting of pregnancy and in many forms of dyspepsia these medicines have been found peculiarly useful. Dr. Lees's paper is a very valuable and practical one, and may be perused by any medical man with advantage.

THERAPEUTIC VALUE OF THE HYPOPHOSPHITES. — Dr. F. Churchill (*British Med. Jour.*, 1880, p. 472) recommends the following formula, which he calls "Liquor Ferri Hypophosphitis Compositus," and of which the following is the percentage composition:

Ferrous hypophosphite .	2.77
Calcium hypophosphite .	3.5
Sodium hypophosphite .	3.5
Magnesium hyphosphite .	1.99
Hypophosphorous acid .	1.66
Water	86.58
	100.00

One fluidrachm is equal to 6.7 grains of the

mixed salts. This liquor is mixed with raisin or other wine in the proportion of one part of the liquor to three parts of the wine, and may be given in half-ounce doses to children about ten years of age. The following formula is suitable for an infant, the dose being increased according to age:

℞ Sodii hypophosph., gr. vj;
Calcis hypophosph.,
Potassii hypophosph., āā gr. iv;
Glycerinæ, ʒii;
Aquæ, ʒi.

M.—Dose, 40 minims thrice daily in a little water.

This mixture must be made up as required, as the hypophosphites deposit after a time when suspended in glycerin. With the exception of a slight chalybeate flavor, this preparation may be said to be tasteless. A few drops on a lump of sugar dissolved in the mouth are agreeable and refreshing. It may be administered in milk or beef tea unknown to the patient. The preparation is particularly recommended in rickets, anæmia, tabes mesenterica, psoriasis, debility from prolonged lactation, in some forms of dyspepsia, in leucorrhœa, myalgia, and muscular pains, as well as in other diseases of debility.

A Case of Typhoid Fever treated with Carbolic Acid Internally.—Dr. Henry Weeks sends to the *Lancet* of February 28 an account of a girl of eighteen who had been ill for a week previous to his first visit. He found her in a very febrile condition, with a highly flushed face, anxious expression, tongue furred, and bowels relaxed three or four times a day. Very little headache; pulse 108; temperature (11 A.M.) 102.5°; skin dry. With the usual instructions as to diet, etc., he prescribed acetate of liquor ammoniæ and compound tincture of camphor. Next day there was no change; sleepless. Day after, slept better; tongue browner; diarrhœa lessened; some scarcely observable spots on abdomen. Pulse 109; temperature (12 A.M.) 103°. A day later, much flushed; tongue more glazed. Pulse 108°; temperature 103.5°. Glycerin of carbolic acid prescribed, six minims every four hours. Twenty-four hours later the pulse had fallen to 100; temperature 101°; tongue moister. Forty-eight hours after the beginning of the carbolic acid treatment the pulse had fallen to 89, the temperature to 99°, and four days later the patient was able to get up and come down-stairs. Convalescence from this date was rapid.

Rapid, Nearly Universal Paralysis—Recovery.—At a recent meeting of the Clinical Society of London, Dr. Buzzard brought forward a case of rapid and almost universal paralysis which had terminated in a complete recovery under treatment. The patient was a man, æt. 44, whose illness had commenced with some drawing of the face to the right, followed shortly afterwards by loss of power and sensation in both upper and lower extremities. On admission into the National Hospital for the Paralyzed, Queen Square, he was found to be paralyzed on both sides of the face, both external recti muscles, and also to a great extent in all four extremities, in the movements of respiration and deglutition, and in the sphincters. There was anæsthesia to touch and pain in the face (especially on the right side), with apparently increased sensibility to heat and cold. Below the middle of each forearm there was almost entire loss of sensibility to touch and pain, whilst heat and cold were distinctly recognized. The sensibility of the trunk was preserved. There was loss of smell and taste on the left side. Electric excitability (by induced currents) was almost absent in the muscles of the face, hands, and lower extremities, and much reduced in the forearms. There was atrophy of the interosseous muscles. Respiration was mainly upper thoracic, the lower part of the chest not expanding, and the movements of the diaphragm being scarcely perceptible. No lesion of the spinal column could be found. The patellar tendon reflex was entirely absent in both knees. Under iodide of potassium at first, and later mercurial inunction, patient began to improve so rapidly that on the next day but one after admission he had regained some power over the external recti muscles, and the sensibility of the face to touch and pain was increased. There was gradual and steady amelioration in all his symptoms, and four months after his admission he returned to his work (tailor's cutting) quite well. The patellar tendon reflex returned about this time in both legs.

Intra-Uterine Medication.—Dr. Edward John Tilt, in a paper read at the late meeting of the British Medical Association (*Brit. Med. Jour.*, 1880, p. 470), says that intra-uterine medication should be reserved for very exceptional cases of the following forms of disease: 1. Incoercible blood-loss, resisting milder remedies and threatening life. 2. When internal metritis menaces life or reason, rather by the intensity of its reaction on the system than by the amount of purulent discharge; for insanity may sometimes be fairly attributed to an impairment of brain-tissue, due to long-protracted internal metritis. 3. When, independently of ovaritis, internal metritis leads to an aggravated combination of dysmenorrhœa and menorrhagia, menacing life or reason. 4. Membranous dysmenorrhœa of exceptional severity. 5. Habitual abortion, independent of syphilis and ovaritis, and seemingly caused by some morbid condition of the lining membrane of the body of the womb.

To Cure Fits of Sneezing.—Mr. Messenger Bradley recommends that in the incessant sneezing which so frequently accompanies a severe cold, the nostrils be plugged with cotton wool. No inconvenience results from the introduction of the pledgets, which should be

sufficiently firm not to tickle, and yet sufficiently loose to breathe easily through.—*Practitioner*, 1880, p. 291; from *Brit. Med. Jour.*

MISCELLANY.

A QUEER CAUSE OF ACTION.—That was a peculiar case that was lately commenced in Cincinnati by Ann Farley, a widow, against Dr. William Carson, a leading physician, to recover five thousand dollars for injuries alleged to have been caused to her feelings by reason of a post-mortem examination made of her husband by the defendant. In her complaint she alleges that her husband went to the Cincinnati Hospital to be treated for injuries which, resulting in an abscess of the liver, caused his death. The defendant, Dr. Carson, made the post-mortem examination without her knowledge or consent, by reason of which she claimed to have been injured to the extent of five thousand dollars. The court held that, as a question of law, no property right in the dead is injured by a post-mortem examination, and that there is no case in which mere injured feelings will give a right of action. The case was taken from the jury and judgment rendered for the defendant.

A FORTUNATE DOCTOR.—Dr. Willim, of Breslau, who recently succeeded in capturing the affections of the Princess Pauline of Würtemberg, is a lucky man. The king, after the mouldy fashion of those worm-eaten despotisms, reduced his fair kinswoman to the ranks by ordering her to assume the name of Fräulein von Kirbach before her marriage, and it is said that the minister who performed the ceremony condoled with the young lady on her downfall. It must have been like a scene from the "Princess Toto." "Oh, degradation!" said the king. But the princess spoke up at the altar and said she considered herself fortunate to get such a fine man.

MULTIPLE STAINING IN MICROSCOPIC INVESTIGATION.—At a recent meeting of the Royal Microscopical Society, Dr. Heneage Gibbes showed transverse sections of the rat's tail, in which the bone, cartilage, nerves, tendon-cells, muscle, and blood-vessels, which had different chemical reactions, were each stained a distinctly different color; a section of a dog's tongue showed the muscle stained pink, the mucous glands purple, and the serous glands supplying the taste-organ green; and a section of the scalp showed the stem of the hair yellow, the root and follicle bright carmine, and the muscular tissue violet, with the nuclei green.

AMONG the recent announcements of the German medical press we note a "Hand-Book of General Therapeutics," written in the usual fashion by various prominent men, and edited by Professor Ziemssen. It will appear in seven parts, each of which may be purchased separately, the whole to cost from fifteen to eighteen dollars. The first volume will be filled with articles on diet for the sick, antipyretic methods, transfusion, hypodermic injection, etc. The work promises to be of high value to the practitioner who has a reading knowledge of the German language.

COFFEE IN UTERINE HEMORRHAGE.—In uterine hemorrhage Dr. Després uses strong coffee, of which he makes his patients take four or five cups daily. He attributes to it properties analogous to those of ergot, and employs it under the same conditions.

WE are happy to announce the appearance of a new edition of Prof. James Tyson's "Guide to the Practical Examination of Urine." It has been corrected and completed in all points, so that it may be relied upon as containing all the latest information upon the subject. It is published by Lindsay & Blakiston.

AT a recent meeting of the Paris Academy of Medicine it was announced that the widow of the late Professor Louis had left by will a sum sufficient to found a triennial prize of eight thousand francs. This is to be awarded for work in therapeutics.

AN amusing book has just been published by a French physician in the form of a novel, entitled "Impressions et Aventures d'un Diabétique à travers la Médecine et les Médecins."

THE oldest inhabitant of Warsaw has just died, at the age of 118. His funeral was attended by two hundred and thirty-five descendants.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 2 TO MAY 15, 1880.

KING, WM. S., LIEUTENANT-COLONEL AND SURGEON.—His leave of absence on account of sickness still further extended six months on account of sickness. S. O. 101, A. G. O., May 7, 1880.

WOODWARD, J. J., MAJOR AND SURGEON.—To proceed to Europe under special instructions to be communicated by the Surgeon-General of the Army. After completion of the duties assigned him, to return to his station in Washington, D.C. S. O. 105, A. G. O., May 12, 1880.

WOOD, M. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Granted leave of absence for six months, and at expiration thereof to comply with Par. 1, S. O. 74, c. s., A. G. O. S. O. 97, A. G. O., May 3, 1880.

GRAY, W. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to temporary duty at Fort Point, Cal. S. O. 55, Division of the Pacific and Department of California, April 27, 1880.

MCCREERY, GEORGE, FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Apache, A. T., as Post-Surgeon, relieving Assistant-Surgeon Walter Reed, U.S.A. S. O. 48, Department of Arizona, April 16, 1880.

SCHUÉ, E. D., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Grant, A.T. S. O. 48, c. s., Department of Arizona.

COCHRAN, J. J., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Lewis, Col. S. O. 94, Department of the Missouri, April 28, 1880.